DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-002223
Date Inspected: 24-Apr-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Japan Steel Works, Ltd.

OSM Arrival Time: 830
OSM Departure Time: 1630
Location: Muroran, Japan

CWI Name:	Rory O'Kane and Chung Kuan	**CWI Present:**	☑ Yes ☐ No
Inspected CWI report:	☐ Yes ☑ No ☐ N/A	**Rod Oven in Use:**	☑ Yes ☐ No ☐ N/A
Electrode to specification:	☑ Yes ☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes ☐ No ☐ N/A
Qualified Welders:	☑ Yes ☐ No ☐ N/A	**Verified Joint Fit-up:**	☑ Yes ☐ No ☐ N/A
Approved Drawings:	☑ Yes ☐ No ☐ N/A	**Approved WPS:**	☑ Yes ☐ No ☐ N/A
		Delayed / Cancelled:	☐ Yes ☑ No ☐ N/A

Bridge No: 34-0006
Component: Tower, Jacking and Deviation Saddles

Summary of Items Observed:

On this date OSM Quality Assurance Representative Daniel L. Reyes observed the testing and the inspections of the Saddle Castings and Procedure Qualification Record (PQR) Test Plate relative to this project. The following was observed:

Fabrication Shop # 4
Procedure Qualification Test Plate-SW-7-2
At the start of the shift this QA inspector observed the continued welding and inspection of the Procedure Qualification Record (PQR) test plate identified as SW-7-2. The welding was performed by Japan Steel Works, Ltd. welding personnel Kouzou Kobayashi ID 08-5023 with the 50 millimeter thick test plate placed in the vertical plane with the welding performed in the upward progression (3G). Mr. Kouzou utilized the Shielded Metal Arc Welding (SMAW) process as per the Welding Procedure Specification (WPS) SJ-2942 WP-11 which was also used by the Quality Control (QC) Inspector Rory O'Kane as a reference. The consumable utilized during the welding of the test plate was identified as a Hobart Electrode product identified as LB52A with a diameter size of 4.0 millimeters which appeared to comply with the AWS A5.1 specification and the E7016 Classification.
The QC inspector Mr. O'Kane verified the minimum preheat temperature of 110 degrees Celsius and at the conclusion of verifying the surface temperature the welder Mr. Kouzou commenced the welding of the root pass. At this time this QA inspector observed the QC inspector verifying the amperage and voltage utilizing a Hioki 3109 Clamp On Hi Tester, Model RMS. The average welding parameters were observed by this QA inspector was as follows; 150 AC amps, 22.0 volts with a travel speed measured at 64 mm/m.
The above observations performed by this QA inspector were performed at random intervals and later in the shift performed a verification of the welding parameters utilizing a Fluke Clamp Meter 337. The verification results

WELDING INSPECTION REPORT

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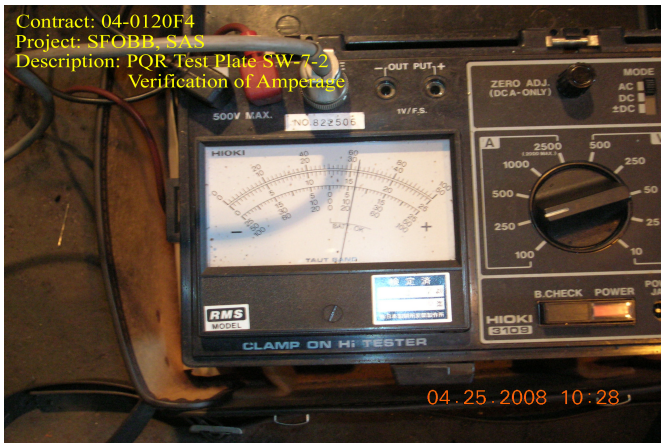
were as follows; 152 AC amps and 22 AC volts with a travel speed measured at 65mm/m.
The welding of the PQR Test Plate identified as SW-7-2 was not completed during this shift on this date.

Later in the shift this QA inspector observed JSW personnel removing rust from the structural steel base plate, stem plate and rib plate components to be utilized for the West Deviation Saddles identified as W2E1 and W2E2. A total of 34 steel plates are located at the north end of the Fabrication Shop # 4. (See Digital Photographs)

Summary of Conversations:
There were general conversations with Japan Steel Works, Ltd. Bridge Group Steel Products Department personnel Kunio Nagaya regarding the locations of inspection personnel.



Comments
This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes,Danny	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer